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10/676,698	09/30/2003	Sandeep K. Gopisetty	ARC920030056US1	7968

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EXAMINER

AUGUSTINE, NICHOLAS

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/676,698
Filing Date: September 30, 2003
Appellant(s): GOPISETTY ET AL.

Lewis Nunnelley
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/07/2007 appealing from the Office action mailed 07/19/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Drew Bird, Storage Basics: Storage Area Networks,
<http://www.enterprisestorageforum.com/sans/features/article.php/981191>, February 26,
2002, pp. 3

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battat et al (US 5,958,012).

As for independent claim 1, Battat teaches a storage area network (SAN)

management system to generate perspectives of a SAN topology (col.4, line 48), the SAN management system including: a SAN manager program to monitor a storage area network (SAN) (col.7, line 61 and col.8, line 5), said SAN manager program capable of generating an adjacency matrix (figure 17; wherein depicted is a matrix showing nodes of a network adjacent to one another), and said SAN manager program capable of facilitating direct data transfers between storage devices without server intervention (Of course those skilled in the art would appreciate that in a SAN storage to storage transfers can happen without sever intervention as widely known in the art:

<http://www.enterprisestorageforum.com/sans/features/article.php/981191;>

[http://en.wikipedia.org/wiki/Storage_area_network#SAN Best Practices and Lessons](http://en.wikipedia.org/wiki/Storage_area_network#SAN_Best_Practices_and_Lessons_Learned;)

[Learned](http://en.wikipedia.org/wiki/Storage_area_network#SAN_Best_Practices_and_Lessons_Learned;);); a SAN management database linked with the SAN manager program (col.7, lines 61-63 and fig.1, 102-103), wherein the SAN management database maintains information identifying devices included within the SAN and connections between the devices (fig.10 and col.8, line 11; wherein a agent interacts with the database/repository to obtain object information; col.11, line 34); a plurality of sensor agents positioned within devices included within the SAN (104, col.8, lines 11-14 and fig.1), wherein the sensor agents gather information associated with events occurring within the SAN and provide the gathered information to the SAN manager for inclusion within

the SAN management database (Col.8, lines 11-14 and fig.1; wherein is depicted of sending events and notifications to the management application); and a topology viewer linked to the SAN manager to generate a user requested topology perspective according to data included within the SAN management database and data associated with a previously requested topology perspective (col.9, lines 39-41 and col.5, line 25; fig.1 and 6; wherein figure 6 deals with the rendering of the current scene to the display device). However, Battat does not expressly disclose the term "SAN", only to suggest that the claimed invention of Battat teaches a program for a network. It would have been obvious to one of ordinary skill in the art at the time of the invention to include SAN as being able to be monitored by the program of Battat, since SAN is a form of a network (col.5, lines 53-67)

As for dependent claim 2, Battat teaches the system of claim 1 wherein the SAN includes hosts, storage devices and switches (col.11, line 2).

As for dependent claim 3, Battat teaches the system of claim 2 wherein the host comprises a database server or a file server (col.10, line 45).

As for dependent claim 4, Battat teaches the system of claim 1 wherein the topology perspective is generated for all devices within the SAN which are visible to a particular host (fig.1, 2, 11 and col.13, line 64).

As for dependent claim 5, Battat teaches the system of claim 1 wherein the topology perspective is generated for all devices within the SAN which are visible to a particular storage device (col.11, line 1).

As for dependent claim 6, Battat teaches the system of claim 1 wherein a previously requested topology perspective is utilized by the topology viewer in the generation of a new user requested topology perspective (fig.2 and 3).

As for dependent claim 7, Battat teaches the system of claim 6 the topology viewer includes a memory for storing information pertaining to the previously requested topology perspectives (col.10, line 12 and 101,102).

As for dependent claim 8, Battat teaches the system of claim 7 wherein the information pertaining to previously requested topology perspectives includes paths which provide access between devices within the SAN (fig.11; wherein is depicted paths of connections between devices, etc).

As for independent claim 9, Battat teaches a method for generating a perspective of a SAN topology, comprising: receiving a request to provide a perspective of a SAN topology (col.8, line 36); analyzing the request at a topology viewer and sending the request to a SAN management program for adjacent nodes; receiving adjacent nodes from the SAN management program by the topology viewer and comparing them

against the topology view cache to identify nodes already included with an adjacency matrix; determining the topology viewer those nodes which should not be in the adjacency matrix; calculating data paths within the requested perspective which have not been previously calculated (col.17, line 17 and col.18, lines 36 and 51); and generating the requested perspective according to both the previously calculated data paths and the calculated data paths (col.9, line 8; wherein the system is calculating the path of navigation from the user and to what devices show up in the object viewer at the instance of time to which the user is at then to which the calculation of other aspects are added into the provide a smooth navigation within a viewer space/ perspective).

However, Battat does not expressly disclose the term "SAN", only to suggest that the claimed invention of Battat teaches a program for a network. It would have been obvious to one of ordinary skill in the art at the time of the invention to include SAN as being able to be monitored by the program of Battat, since SAN is a form of a network (col.5, lines 53-67) (note the analysis of claim 1 as well).

As for dependent claim 10, Battat teaches the method of claim 9 wherein the perspective includes all SAN devices within the SAN topology which are connected to an identified SAN device and all SAN devices which are accessible to the identified SAN device, wherein the identified SAN device is included within the SAN topology (col.11, line 1; wherein the system includes all device relevant and active in a defined area).

As for dependent claim 11, Battat teaches the method of claim 10 wherein the perspective includes a graphical map of all devices within the SAN topology which are visible to the identified device, connections between all of the devices included within the graphical map (fig.11 and 16; wherein figure 11 shows connection lines between devices and figure 16 shows devices connected as described in the related teachings of Battat).

As for dependent claim 12, Battat teaches the method of claim 10 wherein the identified SAN device includes a host, a storage device and a switch (col.11, line 2).

As for dependent claim 13, Battat teaches the method of claim 12 wherein the host comprises a database server or a file server and the storage devices comprise JBODs and storage controllers (col.10, line 45 and col.11, line 1; wherein the viewer of the system can define any type of network device such as redundant array of inexpensive disk / RAID/ JBOD).

As for dependent claim 14, Battat teaches a SAN management system device including system readable code readable by a server system for generating a perspective of a SAN topology (fig.1 and col.7, line 60), *comprising: logic means for receiving a request to provide a perspective of a SAN topology; logic means for analyzing the request at a topology viewer and sending the request to a SAN management program for adjacent nodes; logic means for receiving adjacent nodes*

from the SAN management program by the topology viewer and comparing them against a topology viewer cache to identify nodes already included with an adjacency matrix; logic means for determining by the topology viewer those nodes which should not be in the adjacency matrix; logic means for calculating data paths within the requested perspective which have not been previously calculated; and logic means for generating the requested perspective according to both the previously calculated data paths and the calculated data paths, whereby the perspective includes all SAN devices within the SAN topology which are connected to an identified SAN device and all SAN devices which are accessible to the identified SAN device, wherein the identified SAN device is included within the SAN topology, whereby the SAN device includes a host, a storage device and a switch (note the analysis of claims 1,9 – 13). However, Battat does not expressly disclose the term “SAN”, only to suggest that the claimed invention of Battat teaches a program for a network. It would have been obvious to one of ordinary skill in the art at the time of the invention to include SAN as being able to be monitored by the program of Battat, since SAN is a form of a network (col.5, lines 53-67)

As for independent claim 15, Battat teaches a method of updating each of a cache of including perspectives of hosts, devices and switches in a SAN, based on a change to the SAN's configuration or an identification of devices missing from the SAN's configuration (col.8, line 13 and fig. 1-4).

(10) Response to Argument

Beginning on page 6 and ending on page 8 of Appellant's Brief (hereinafter "Brief"); Appellant argues a specific issue, which is accordingly addressed below.

A1. The Appellant argues that Battat does not teach the using of matrix algebra to generate the adjacency matrix of the present invention.

R1. The Examiner does not agree and further more the limitation of generating an adjacency matrix is not claimed in either of the claims 1-15, thus making this argument invalid.

The Appellant strongly stresses the invention is generating an adjacency matrix using matrix algebra.

As for claim 1, the Examiners reads the claim language as a SAN manager program that is capable of generating an adjacency matrix, thus only claiming to a SAN manager program and not a means of or method of generating an adjacency matrix. Also the use of matrix algebra is not present in claim 1. Emphasis added.

As for claim 9 and 14, the Examiner reads the claim language as not having claimed generating an adjacency matrix but only to a means of to compare. Also the use of matrix algebra is not present in claim 9 and 14.

The Examiner also would like to point out that the Appellant agrees that Battat outputs the same end result as stated on page 7 of the Brief and that the approach ("generating an adjacency matrix using matrix algebra") is the only distinction between the prior art made of record and the immediate application. Thus since the limitation of

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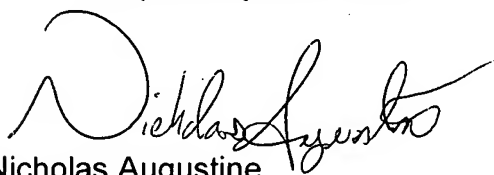
"generating an adjacency matrix using matrix algebra" is not present in the current claim language of claims 1-15 it is to the Examiners best understanding that the prior art made of record is efficient enough to overcome the immediate application as rejected under 35 U.S.C. 103 in the office action mailed 07/19/2007.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

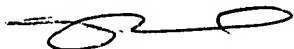


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